This Page Is Inserted by IFW Operations and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTI-CORE TRANSFORMER PLASMA SOURCE the specification of which was filed on April 20, 2001 as Application No. 09/839,360.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

•5	Country	Application No.	Date of Filing	Priority Claimed Under 35 USC 119
	,	-		

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date

I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Peter J. Sgarbossa	Registration No. 25,610
Joseph Bach	Registration No. 37,771
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
Robert C. Colwell	Registration No. 27,431
William L. Shaffer	Registration No. 37,234
Chun-Pok Leung	Registration No. 41,405
Patrick R. Jewik	Registration No. 40,456

Direct telephone calls to: Send correspondence to: Patrick M. Boucher Patent Counsel, MS/2061 303-571-4000 Legal Affairs Dept. Applied Materials, Inc. P.O. Box 450A Santa Clara, CA 95052 5/27/03 Full name of first inventor: Canfeng Lai Inventor's signature: Citizenship: Peoples Republic of C Full name of second inventor: Michael S. Cox Date: Inventor's signature: Citizenship: United States Peter K. Loewenhardt Full name of third inventor: Inventor's signature: Citizenship: Canada Full name of fourth inventor: Tsutomu Tanaka Date: Inventor's signature: Citizenship: Japan Full name of fifth inventor: Shamouil Shamouilian Date: Inventor's signature: Citizenship: United States I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Registration No. 39,496 Registration No. 44,037

Kent J. Tobin

DE 7101366 v1

Patrick M. Boucher

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTI-CORE TRANSFORMER PLASMA SOURCE the specification of which was filed on April 20, 2001 as Application No. 09/839,360.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Si reprodució			Priority Claimed Under
Country	Application No.	Date of Filing	35 USC 119

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date

I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Peter J. Sgarbossa	Registration No. 25,610
Joseph Bach	Registration No. 37,771
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
Robert C. Colwell	Registration No. 27,431
William L. Shaffer	Registration No. 37,234
Chun-Pok Leung	Registration No. 41,405
Patrick R. Jewik	Registration No. 40,456

Kent J. Tobin
Patrick M. Boucher

Registration No. 39,496 Registration No. 44,037

Send correspondence to:

Direct telephone calls to:

Patent Counsel, MS/2061 Legal Affairs Dept. Applied Materials, Inc. P.O. Box 450A Santa Clara, CA 95052

Canfeng Lai

Full name of first inventor:

Patrick M. Boucher 303-571-4000

Inventor's signature:	<i>g</i>	Date:	
Inventor's signature: Citizenship: Peoples Republic	of China		
Full name of second inventor: Inventor's signature: Citizenship: United States	Michael S. Cox	Date:	06-05-03
Full name of third inventor: Inventor's signature: Citizenship: Canada	Peter K. Loewenhardt	Date:	
Full name of fourth inventor: Inventor's signature: Citizenship: Japan	Tsutomu Tanaka	Date:	
Full name of fifth inventor: Inventor's signature: Citizenship: United States	Shamouil Shamouilian	Date:	

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

DE 7101366 v1

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTI-CORE TRANSFORMER PLASMA SOURCE the specification of which was filed on April 20, 2001 as Application No. 09/839,360.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

Country	Application No.	Date of Filing	Priority Claimed Under 35 USC 119
	-		

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date
·	

I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Peter J. Sgarbossa	Registration No. 25,610
Joseph Bach	Registration No. 37,771
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
Robert C. Colwell	Registration No. 27,431
William L. Shaffer	Registration No. 37,234
Chun-Pok Leung	Registration No. 41,405
Patrick R. Jewik	Registration No. 40,456

Kent J. Tobin Registration No. 39,496 Registration No. 44,037 Patrick M. Boucher Direct telephone calls to: Send correspondence to: Patrick M. Boucher Patent Counsel, MS/2061 303-571-4000 Legal Affairs Dept. Applied Materials, Inc. P.O. Box 450A Santa Clara, CA 95052 Full name of first inventor: Canfeng Lai Inventor's signature: Date: Citizenship: Peoples Republic of China Full name of second inventor: Michael S. Cox Inventor's signature: Date: Citizenship: United States Full name of third inventor: Inventor's signature:

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

Date:

Tsutomu Tanaka

Shamouil Shamouilian

DE 7101366 v1

Citizenship: Canada

Inventor's signature: Citizenship: Japan

Inventor's signature:
Citizenship: United States

Full name of fourth inventor:

Full name of fifth inventor:

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTI-CORE TRANSFORMER PLASMA SOURCE the specification of which was filed on April 20, 2001 as Application No. 09/839,360.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

	Country	Application No.	Date of Filing	Priority Claimed Under 35 USC 119
Ì		-		

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date

I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status
1		

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Peter J. Sgarbossa	Registration No. 25,610
Joseph Bach	Registration No. 37,771
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
Robert C. Colwell	Registration No. 27,431
William L. Shaffer	Registration No. 37,234
Chun-Pok Leung	Registration No. 41,405
Patrick R. Jewik	Registration No. 40,456

Kent J. Tobin Patrick M. Boucher Registration No. 39,496 Registration No. 44,037

Send correspondence to:

Direct telephone calls to:

Patent Counsel, MS/2061 Legal Affairs Dept. Applied Materials, Inc.

Patrick M. Boucher 303-571-4000

P.O. Box 450A Santa Clara, CA 95052

Full name of first inventor: Inventor's signature: Citizenship: Peoples Republic	Canfeng Lai	Date: _	
Full name of second inventor: Inventor's signature:	Michael S. Cox	Date:	
Citizenship: United States			·
Full name of third inventor: Inventor's signature: Citizenship: Canada	Peter K. Loewenhardt	Date: _	
Full name of fourth inventor: Inventor's signature: Citizenship: Japan	Tsutomu Tanaka	Date: _	June 2, 2003
Full name of fifth inventor: Inventor's signature: Citizenship: United States	Shamouil Shamouilian	Date:	

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

DE 7101366 v1

SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: MULTI-CORE TRANSFORMER PLASMA SOURCE the specification of which was filed on April 20, 2001 as Application No. 09/839,360.

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

ъ.	Country	Application No.	Date of Filing	Priority Claimed Under 35 USC 119
Ì				

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

Application No.	Filing Date

I claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Date of Filing	Status

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Registration No. 25,610
Registration No. 37,771
Registration No. 33,217
Registration No. 25,226
Registration No. 37,165
Registration No. 35,412
Registration No. 25,436
Registration No. 27,431
Registration No. 37,234
Registration No. 41,405
Registration No. 40,456

Send correspondence to: Direct telephone calls to: Patrick M. Boucher Patent Counsel, MS/2061 Legal Affairs Dept. 303-571-4000 Applied Materials, Inc. P.O. Box 450A Santa Clara, CA 95052 Full name of first inventor: Canfeng Lai Inventor's signature: Date: Citizenship: Peoples Republic of China Full name of second inventor: Michael S. Cox Inventor's signature: Date: Citizenship: United States Full name of third inventor: Peter K. Loewenhardt Date: Inventor's signature: Citizenship: Canada Full name of fourth inventor: Tsutomu Tanaka Inventor's signature: Citizenship: Japan Date: 6/23/03 Shamouil Shamouilian Full name of fifth inventor: Inventor's signature: Shamovil Shamovili Citizenship: United States

Registration No. 39,496

Registration No. 44,037

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

DE 7101366 vI

Kent J. Tobin

Patrick M. Boucher



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

JULY 1B, 2001

PTAS

APPLIED MATERIALS, INC. ROBERT W. MULCAHY PATENT COUNSEL LEGAL AFFAIRS DEPARTMENT P.O. BOX 450A, M/S 2061 SANTA CLARA, CALIFORNIA 95052



UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

RECO JUL 2 4 2001 THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME-APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/20/2001

REEL/FRAME: 011753/0518

NUMBER OF PAGES: 13

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

LAI, CANFENG

DOC DATE: 04/12/2001

ASSIGNOR:

COX, MICHAEL S.

DOC DATE: 04/16/2001

ASSIGNOR:

LOEWENHARDT, PETER K.

DOC DATE: 04/10/2001

ASSIGNOR:

TANAKA, TSUTOMU

DOC DATE: 04/16/2001

COMPUTER ENTERED

ASSIGNOR:

SHAMOUILIAN, SHAMOUIL

DOC DATE: 04/12/2001

JUL 2 5 2007 .

ASSIGNEE:

APPLIED MATERIALS, INC. P.O. BOX 450A LEGAL AFFAIRS DEPARTMENT SANTA CLARA, CALIFORNIA 95052 011753/0518 PAGE 2

SERIAL NUMBER: 09839360

PATENT NUMBER:

FILING DATE: ISSUE DATE:

SAUNDRA BALLENGER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

			و جو ا
0	5-07-2001		v.S
Expires 06/30/99 OMTA 0651-0027	101702581	PAICH	11017 0
RECORDA	TION FORM COVER	₹ SHEET	
	PATENTS ONLY	Attorney Docket No	j
TO: The Commissioner of Patents and Trademark	co. Please moord the attach	ned original document(s) or copy(les).	
Submission Type 04/20/01	Conveyance Type Assignment	Security Agreement	
Resubmission (Non-Recordation) Document ID #	License	Change of Name	n
Correction of PTO Error	☐ Merger	Other	۱ . ۱
Reel# Frame#	(For the	U.S. Government ONLY by U.S. Government Agencies)	
Corrective Document		tmental File Secret File	
Reel# Frame #		nes of conveying parties attached	
Conveying Party(ies)	Mark II annunue	Execution Date Month Day Year	
Confond 2		4-12-01]
Name (line 1) Canfeng Lai			
Name (line 2)			İ
Second Party		Execution Date Month Day Year	l
		4-16-01]
Name (line 1) Michael S. Cox			- I
Name (line 2)			1
Name (mo z)		ditional names of receiving parties attached	
Receiving Party	☐ Mark it adi		
Name (line 1) Applied Materials, Inc.		If document to be recon	the ded
Name (line 2)		receiving party is not domicfied in the United	States.
		an appointment of a do representative is attact	omestic
Address (line 1) Legal Affairs Department		(Designation must be a separate document fro	8
Address (line 2) P.O. Box 450A		Assignment.)	•//
Audieso (mie Z) F.O. Dox 700/1			
Address (line 3) Santa Clara .	California	95052	
City	State/Country	Zip Code or the first Receiving Party only.	
Domestic Representative Name and A	Address che io	If the that receiving t any eng-	-
Name			
Address (line 1)			
Address (line 2)			
Address (line 3)			
Address (line 4)			
Address (iiiie 4)	FOR OFFICE USE ON	ui V	
	FOR OFFICE USE ON		

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 2021 and to the Office of Information and Regulatory Affairs, Office of Washington and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mall documents to be recorded with required cover sheet(s) Information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

05/04/2001 STUH11 00000130 501074

01 FC:581

40.00 CH

09839360

CEST AVAILABLE COPY

			1
FORM PTU-1619C Expires 06/30/99 OMR 0651-0027	RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY	U.S. Department of Commerce Patent and Trademark Office PATENT D	09/83350
	Mark if additional names of conveying	parties attached	
Conveying Party	——————————————————————————————————————	Execution Date Month Day Year	
Enter additional Con		4-10-01	
Name (line 1)	Peter K. Loewenhardt	- — ·	
Name (line 2)		Execution Oate	
(12.11.5 (–) L		Month Day Year	
	T. A Teagle	4-16-01	
Name (line 1)	Tsutomu Tanaka	-	-
Name (line 2)		Execution Date	- [
_	 -	Month Day Year	-
Name (line 1)	Shamoull Shamouitian	4-12-01	1
Name (me) [Stidillodi Chambana	٦	1
Name (line 2)		_	
			一
Receiving Party(ies) Mark if additional names of	of receiving panies attached	.
Enter additional Re	eceiving Party(les)	-	
Name (line 1)		if document to be recorded is an assignment and the	ŀ
		receiving party is not dominited in the United	1
Name (line 2)		States, an appointment	
		of a domestic rapresentative is attached.	
Address (line 1)		(Designation must be a separate document from	
Address (line 2)		Assignment.)	
Address (line 3)	City State/Country	Zip Code	
	City State/Country		
Name (line 1)		If document to be recorded ls an assignment and the receiving	
		party is not domiciled in the United	
Name (line 2)		States, an appointment	
Address (line 4)		of a domestic representative is attached.	
Address (line 1)		(Designation must be a separate document from	
Address (line 2)		Assignment.)	
Address (line 3)	City State/Country	Zip Code	
Application N	umber(s) or Patent Number(s)	I numbers attached	
Enter eilber i	the Patent Application Number of the Patent Number (DO NOT ENTER BOTH number	bers (or the same property).	
	nt Application Number(s)	ent Number(5)	٦
			7
			الـ
			L
			כ
			_
PA 3136597 v1			Ì

BEST AVAILABLE COPY

FORM P1'O-1619 Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent	Name and Address Area Code and Telephone Number	(650) 326-2400
Name	Patent Counsel	
Address (line 1)	APPLIED MATERIALS, INC.	
Address (line 2)	Legal Affairs Department	
Address (line 3)	P.O. Box 450A, M/S 2061	
Address (line 4)	Santa Clara, California 95052	
Pages	Enter the total number of pages of the attached conveyar including any attachments	
If this document is bei signed by the first nam Patent Cooper Enter Poonly If a Number Number of Pro	the Patent Application Number or the Patent Number (DO NOT ENTER Ent Application Number(s) In Application Number(s) In gilled together with a new Patent Application, enter the data the patent area executing inventor. In application number PCT PCT U.S. Application has not been assigned. PCT PCT	Patent Number(s) application was Month Day Year PCT PCT ed. # 1 3.41): \$ 40.00
Deposit 4	Account symbol by deposit account or if additional fees can be charged to the account by deposit Account Number:	point.) # 50-1074
attached indicated Robert W. Mukah Attomey Reg. No.	est of my knowledge and belief, the foregoing information is copy is a true copy of the original document. Charges to de therein.	and correct and any
Name of Per	son Signing 'Signature	

Attorney Docket No.: A5152/T39500 AMAT No.: 005152/PDD/CORE DCVD/JW TTC No.: 016301-039500US

110110.: 010001-00000

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Canfeng (Ken) Lai, Ph.D 47615 Hoyt Street Fremont, CA 94539 United States	2)	Michael S. Cox 40 Center Street Davenport, CA 95017 United States
3)	Peter K. Loewenhardt 5602 Selena Ct Plessanton, CA 94566 United States	4)	Tsutomu Tanaka 744 Nicholson Avenue Santa Clara, CA 95051 United States
. 5)	Sharnouil Sharnouilian 6536 Little Falls Drive San Jose, CA 95120 United States		

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MULTI-CORE TRANSFORMER PLASMA SOURCE

for which application for Letters Patent in the United States was filed on Herewith, under Application No. Unassigned, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is deslrous of acquiring the entire right, title and Interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- Said Assigner to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assigners shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein convived; (b) for prosecuting any of said applications; (c) for filling and prosecuting substitute, divisional, continuing in additional applications covering said Invention; (d) for filling and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings

involving said Invention; and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	April 12 ,2001	Canfeng Lai
2)	, 2001	Michael S. Cox
3)	, 2001	Peter K. Loewenhardt
4)		Tsutomu Tanaka
5)	, 2001	Shamouil Shamouilian

PA 3136592 VI

Attorney Docket No.: A5152/T39500 AMAT No.: 005152/PDD/CORE DCVD/JW TTC No.: 016301-039500US

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Canfeng (Ken) Lai, Ph.D 47615 Hoyt Street Fremont, CA 94539 United States	2)	Michael S. Cox 40 Center Street Davenport, CA 95017 United States
3)	Peter K. Loewenhardt 5602 Selena Ct Pleasanton, CA 94566 United States	4)	Tsutomu Tanaka 744 Nicholson Avenue Santa Clara, CA 95051 United States
5)	Shamouil Shamouilian 6536 Little Falls Drive San Jose, CA 95120 United States	•	

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MULTI-CORE TRANSFORMER PLASMA SOURCE

for which application for Letters Patent in the United States was filed on Herewith, under Application No. Unassigned, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said invertion herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filling and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filling and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings

involving said Invention; and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	, 2001	
		Canfeng Lai
2)	,2001	Michael S. Cox
3)	, 2001	Peter K. Loewenhardt
4)	April 16 ,2001	Tsutomu Tanaka
5)	, 2001	Shamouil Shamouilian

PA 3136592 V1

Attorney Docket No.: A5152/T39500 AMAT No.: 005152/PDD/CORE DCVD/JW TTC No.: 016301-039500US

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

::-:<u>:::</u>::

Names and Addresses of Inventors:

1)	, Canfeng (Ken) Lai, Ph.D 47615 Hoyt Street Fremont, CA 94539 United States	2)	Michael S. Cox 40 Center Street Davenport, CA 95017 United States
3)	Peter K. Loewenhardt 5602 Selena Ct Pleasanton, CA 94566 United States	4)	Tsutomu Tanaka 744 Nicholson Avenue Santa Clara, CA 95051 United States
5)	Shamouil Shamouilian , 6536 Little Falls Drive San Jose, CA 95120 United States		·

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MULTI-CORE TRANSFORMER PLASMA SOURCE

for which application for Letters Patent in the United States was filed on Herewith, under Application No. Unassigned, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assigne (a) for perfecting in said Assignee the right, title and interest her in conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings

involving said Invention; and (f) for legal proceedings involving said Invention and any application Iherefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	, 2001	
2)	4/16/01 ,2004	Canfeng Lai
3)		
4)	, 2001	Peter K. Loewenhardt
5)	. 2001	Tsutomu Tanaka
		Shamouil Shamouilian

PA 3136592 v1

Attorney Docket No.: A\$152/T39500

AMAT No.: 005152/PDD/CORE DCVD/JW

TTC No.: 015301 03050015

TTC No.: 016301-039500US

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Canfeng (Ken) Lai, Ph.D 47615 Hoyt Street Fremont, CA 94539 United States	2)	Michael S. Cox 40 Center Street Davenport, CA 95017 United States
3)	Peter K. Loewenhardt 5602 Sclena Ct Pleasanton, CA 94566 United States	4) .	Tsutomu Tanaka 744 Nicholson Avenue Santa Clara, CA 95051 Uniled States
5)	Shamouil Shamouilian 6536 Little Falls Drive San Jose, CA 95120 United States		

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MULTI-CORE TRANSFORMER PLASMA SOURCE

for which application for Letters Patent in the United States was filed on Herewith, under Application No. Unassigned, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to sald application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every relssue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, glying testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings

involving said Invention; and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	. 2001	
-,		Canfeng Lai
2)	, 2001	Michael S. Cox
3)	, 2001	Peter K. Loewenhardt
4)	2001	Tsutomu Tanaka
5)	4//2 - ,2001	Shamosi/Shamosila

PA 3136592 v1

Afterney Docket No.: A5152/T39500 AMAT No.: 005152/PDD/CORE DCVD/JW TTC No.: 016301-039500US

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

1)	Canfeng (Ken) Lai, Ph.D 47615 Hoyt Street Fremont, CA 94539 United States	2)	Michael S. Cox 40 Center Street Davenport, CA 95017 United States
3)	Peter K. Loewenhardt 5602 Selena Ct Pleasanton, CA 94566 United States	4)	Tsutomu Tanaka 744 Nicholson Avenue Santa Clara, CA 95051 United States
5)	Shamouil Shamouilian 6536 Little Falls Drive San Jose, CA 95120 United States		

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MULTI-CORE TRANSFORMER PLASMA SOURCE

for which application for Letters Patent in the United States was filed on Herewith, under Application No. Unassigned, executed on even date herewith; and

WHEREAS, Applied Materials, Inc., a corporation of the State of Delaware, having a place of business at 3050 Bowers Avenue, Santa Clara, California 95054 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings

involving said Invention, and (f) for legal proceedings involving said Invention and any application therefor and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.

- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

1)	, 2001	Canfeng Lai
2)	, 2001	Michael \$/. Cox
3) April 10	2001	Peter K. Loewenhardt
4)	, 2001	Tsutomu Tanaka
5)	, 2001	Shamouil Shamouilian

PA 3136592 VI